Appl. No. 09/905,384
Amdt. dated February 28, 2005
Reply to Office Action of November 30, 2004

PATENT

REMARKS/ARGUMENTS

I.   Status of the Application

As filed, the application contains claims 1-24. A first office action mailed November 30, 2004 rejected claims 10-12 and 15-24 under 35 U.S.C. § 102(e) as being anticipated by U.S. Pat. App. Pub. No. 2002/015145 ("Wanta"). The office action also rejected claims 1, 2, 6, 8, 9 and 13 under 35 U.S.C. § 103(a) as being unpatentable over Wanta, claims 3-5 under § 103(a) as being unpatentable over Wanta in view of allegedly admitted prior art, and claims 7 and 14 under § 103(a) as being unpatentable over Wanta in view of U.S. Patent No. 6,751,646 ("Chow").

This amendment amends claims 1, 10 and 17 and adds new claim 25. No claims have been canceled. Hence, after entry of this amendment, claims 1-25 stand pending for examination.

II.   Claim Amendments

Claims 1, 10 and 17 have been amended, and claim 25 has been added. Claim 1 has been amended to recite "an object request broker in communication with the first computer and configured to send a message to the second computer, the message being related to the function." Support for this amendment may be found in the application at, inter alia, lines 8-17 of page 6, as well as Fig. 4. Claim 10 has been amended to recite "an object request broker configured to pass the requests from the client program," and support for this amendment may be found in the location(s) cited above. Claim 17 has been amended to recite selecting "with a distributor" and providing "with an object request broker." Support for this amendment may be found in the location(s) cited above, as well as at, inter alia, lines 18-25 of page 6. New claim 25 recites that "the object request broker resides on the first computer." Support for this claim may be found at, inter alia, Fig. 4.

Appl. No. 09/905,384
Amdt. dated February 28, 2005
Reply to Office Action of November 30, 2004

PATENT

III.   Rejections under §§ 102(e), 103(a):

The office action rejected all pending claims as being either anticipated by or unpatentable over Wanta, taken either alone or in combination with other references. The applicant respectfully traverses the rejections and submits the following arguments in support of his position.

Wanta fails to teach or suggest each of the elements of any pending claim. Merely by way of example, claim 1 recites that "wherein the distributor program selects between the first and the second object to perform the function for the client program." To the extent Wanta teaches any sort of distribution among various objects (which, the applicant respectfully submits, Wanta does not), Wanta teaches that an object request broker ("ORB") handles this distribution. For example, in the passage cited by the examiner, Wanta (¶ 24) discloses that "the object request broker receives requests from a client and then searches for an available object to service the request."

The ORB is well known in the art, and this operation attributed by Wanta is standard functionality for an ORB, as disclosed in the background of the current application. In contrast, claim 1 recites a different component, a distributor program, which "selects between the first and second objects to perform the function for the client program." This is fundamentally different from the operation of Wanta, where the ORB simply searches for an available object. Although the applicant submits that claim 1, as filed, sufficiently claims this fundamental innovation over Wanta, claim 1 has been amended to more clearly specify that the distributor program is a different software component than the ORB. As amended, claim 1 certainly is distinct from the system taught by Wanta, which does not contemplate a distributor separate from the ORB.

The other type of "load balancing" taught by Wanta does not involve either an ORB or a distributor. Instead Wanta (¶¶ 85-86) teaches that a "node manager" load balances between servers by establishing a nodelist, and then "the client application attempts to connect to each server in the list until it is successful." Again, this is fundamentally different than the claimed invention, because nothing in Wanta's system selects an object for the client application-

Appl. No. 09/905,384
Amdt. dated February 28, 2005
Reply to Office Action of November 30, 2004

PATENT

-instead, the client application iteratively attempts to connect to each server in the list until successful.

Hence, the applicant respectfully suggests nothing in Wanta either teaches nor suggests this innovation over the known prior art. Further, none of the other references cited by the office action remedies this deficiency of Wanta. Claims 10 and 17, at least as amended, are allowable over Wanta for at least the reasons discussed above.

Dependent claims 2-9, 11-16 and 18-25 are allowable as depending from allowable base claims and as being directed to specific novel substitutes. Merely by way of example, claim 3 recites that "the first and second object proxies are maintained in a cache associated with the distributor program." The allegedly admitted prior art in the background of the present application merely discloses that "[t]he ORB provides a proxy object in the client's address space." Nothing in this disclosure reasonably can be read to teach or suggest even a distributor (which, as described above, is one of the features of the present invention), let alone that proxy objects might be maintained in a cache associated with a distributor program.

Nor do any of the cited references teach or suggest the elements of claim 6, which recites that "the distributor program identifies the first and second objects as providing the function and associates the first and second objects in a group." Apart from Wanta's failure even to teach a distributor program at all (as discussed above), nothing in Wanta teaches that a first and second object might be identified as providing a given function and associated in an object group. The office action basically asserts that the "domains" taught by Wanta are the equivalent of the "object group" recited by claim 6. Wanta (¶¶ 50-51), however, merely teaches that a given domain "supports the data processing needs of a particular business unit in the bank." Clearly, then, a domain in Wanta's system would contain all of the objects for the processing needs of a particular business unit, so a domain necessarily would contain a variety of different types of objects. If Wanta's domain concept were substituted for the object group recited in claim 6, a client application would be free to call any of the objects in the domain for a given function; however, it is clear from the disclosure of Wanta that many objects in a domain must perform vastly different functions, so there is no guarantee that any two objects in a given

domain would even be able to perform the same function, let alone that they would return the same result from performing that function. Substituting Wanta's domains for the object group recited in claim 6, then, would render (at best) very unpredictable results. Hence, neither the domain concept nor any other disclosure of Wanta teaches or suggests this element of claim 6, and claim 6 therefore is allowable over the cited references.

Wanta also fails to teach or suggest the elements of claim 16, which recites that "the distributor program provides for both fine and coarse balancing of object distribution." Nothing in ¶¶ 19-20 of Wanta, cited by the office action, teaches or suggests either fine or coarse load balancing, as those terms are used in the application. Moreover, while ¶ 86 of Wanta does teach that objects may persist if necessary, this teaching fails to provide any enabling disclosure that would teach or suggest the elements of claim 16. For at least this additional reason, claim 16 is allowable over Wanta.

For these and other reasons, the dependent claims are allowable over the cited references. The applicant therefore suggests that all pending claims are allowable over the cited references and respectfully requests the withdrawal of the rejections of claims 1-24 and the allowance of claims 1-25. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at 303-571-4000.

Respectfully submitted,

Chad E. King
Reg. No. 44,187

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: 303-571-4000
Fax: 415-576-0300
CEK:tnd
60390309 v1